

Title (en)  
Electromagnetic meniscus control in continuous casting

Title (de)  
Elektromagnetische Kontrolle des Meniskus beim Stranggiessen

Title (fr)  
Contrôle électromagnétique du ménisque dans la coulée continue

Publication  
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Application  
**EP 98119150 A 19981009**

Priority  
US 97258097 A 19971118

Abstract (en)  
A strip casting apparatus comprises a pair of counter-rotating rolls (49,52) having mutually facing surfaces and a vertically extending space therebetween for containing a pool of molten metal (65) having a top surface. A meniscus is located where the top surface of the molten metal pool contacts each of the mutually facing surfaces. Various expedients are provided for electromagnetically controlling the meniscus. In one embodiment, the electromagnetic force for controlling the meniscus is generated by a conductive coil (82) through which is flowed a time-varying current. In another embodiment, a magnetic member is employed with the coil to influence the magnetic field produced by the coil. <IMAGE>

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**B22D 11/06** (2006.01); **B22D 11/115** (2006.01); **B22D 11/16** (2006.01); **B22D 11/18** (2006.01)

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Citation (search report)  
• [DA] US 4982796 A 19910108 - LARI ROBERT J [US], et al  
• [A] PATENT ABSTRACTS OF JAPAN vol. 016, no. 094 (M - 1219) 9 March 1992 (1992-03-09)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 096, no. 011 29 November 1996 (1996-11-29)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 325 (M - 737) 5 September 1988 (1988-09-05)

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